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# The Impact of Managers' Optimism on the Relationship between Patience of Major Shareholders and Information Influence Management

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#### ABSTRACT

Behavioral financial knowledge deals with the behavior of investors and other users in the capital market. According to the financial knowledge, it is no longer expected that only factors such as accounting information and macroeconomic variables will affect decision-making but also a variety of behavioral variables including manager's optimism, information influence management, patience of major shareholders and other investors' biases can have an impact on the prices and stock returns. The purpose of this study was to investigate the impact of managers' optimism on the relationship between the patience of major shareholder and information influence management. This study attempted to investigate the relationship between these behaviors and information influence management by measuring the degree of major shareholders patience and managers' optimism. This was a descriptive post-event research. The study population consisted of the companies listed on Tehran Stock Exchange (n=87) between the years 2008 and 2017. Multivariate regression was used to test the hypotheses. The findings showed no significant relationship between the major shareholders' patience and the information influence management (high, low, balanced). Further, it was found that managers' optimism had a significant effect on the relationship between the major shareholders' patience and the information influence management (balanced level) and no significant relationship was observed between two other levels.

# 1 Introduction

Increasing environmental complexity and the massive changes make it inevitable for managers to prepare financial reporting. Growing and continuous changes in environmental conditions, for example, changes in the form of production, distribution and sales procedures, introduction of new financing tools and procedures, increased competition in capital markets for earning additional profits from private sector capital, as well as increased competition in the business field are likely to make the reporter's unit managers, who are closely related with those developments and are responsible for making financial statements, apply their knowledge, professional judgment and a fairly wide range of powers

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in financial reporting process. Accordingly, it can be concluded that the inherent qualities of the business environment and inevitable properties of financial reporting are in such a way that they would inevitably make the reporter's unit managers exercise their power in the process of preparing financial statements and providing financial reports [4]. In today's turbulent world, organizations and communities are confronted with the tremendous technological and environmental transformations and consequently, global trade and globalization. Thus, the ability to attain the higher and expected level of performance has gone into the midst of ambiguity. In this regard, the presence of a coherent and efficient management system may guarantee the revitalizing and growing life of organizations. In other words, the coherence of reporting capability is the key for organizational management that can lead to good performance of organizations in the current situation. However, the need to make a decision is raised when the manager is needed to choose between two or more different decisions [22]. Therefore, some behavioral factors found in the manager's personality would help them to direct their decision-making process [16]. Debates over behavioral finance and psychology are one of the important issues that received relatively little attention from the efficient market hypothesis theorists. To analyze the role of emotions such as fear and avidity, predictions and expectations shape the investment decisions. Behavioral finance has studied the impacts of psychological factors on management decisions under uncertain conditions. In addition, conventional finance is based on a set of ideal assumptions, such as a completely rational behavior and full self-interest of investor. However, the passage of time and observation of some market abnormalities, such as the January effect, led to behavioral and psychological issues in the financial field and the formation of behavioral financial knowledge [33]. Contrary to the conventional financial knowledge, behavioral financial knowledge has been built on the notion that human has both logical and emotional dimensions and emotional dimension is more effective to interpret and analyze information than logical dimension. Accordingly, Keynes believed that people's emotions affect human behavior instead of logical processes [9]. On the other hand, to examine the impact of information on shareholders' decisions, it is better to categorize them based on the limited and unlimited levels of patience. The extent of impact is among the factors affecting the patience level. Users have some limited and unlimited patience levels. The patience of major shareholders is fallen into limited category with endless time limit. The capacities involved in Iranian Trade Law make it possible for managers to be selected in the subsequent management elections, which consequently, leads to the formation of unlimited patience level. Patience is defined as a behavioral and personality trait that provides adequate time for its target audience. In the meantime, the audience makes use of opportunistic motivation or efficiency given by the individuals with patience trait. As a result, the manager becomes able to better control the impact of information when faced with the individuals having patience [7]. Shareholders analyze disclosed information based on the financial statements of the company, which in turn, may affect their decision regarding the optimal allocation of capital. The manager may be either mandatory or voluntary to take the responsibility for providing and disclosing the information. Therefore, it is a good opportunity for managers to take some measures for providing appropriate information when it is required or in special situations. As a result, based on these behavioral characteristics and the impact that they can have on information impact management, managers are likely to openly disclose or limit information according to their own circumstances and interests. Because of the greater awareness of the status of the organization and the exercise of their discretion in providing information, managers can prepare and present information in such a way that it best reflects the performance of the organization

and in this way, the perceptions of the raters affect the company's performance and increase its organizational value. If the information is properly provided to all shareholders, the managers become able to attain their desired objectives. In other words, the influence of information management is an attempt to manage and control the impacts of information on the assessments and decisions made by users so as to exploit financial information for protecting current interests or achieving the desired objectives of the managers. Therefore, information such as earnings per share can affect the behavior of users, especially actual and potential shareholders, and may increase or decrease the price and volume of stock transactions. On the other hand, stakeholders are not always shareholders and do not have the same incentives to oversee the procedures adopted by the firms. They support the management behavior, or actively engage in the administration of the company and restrict the freedom of management depending on the time horizons of their investments. This implies that due to their long-term investment horizon, stakeholders with high levels of patience may motivate managers to manage the impact of information in order to increase their current incomes. However, stakeholders with low levels of patience put an emphasis on the performance of current profits and decrease the impacts of information management as a complementary structure to corporate governance [18]. The results of numerous studies based on the behavioral finance literature suggested that emotional and cognitive factors such as behavioral bias play a pivotal role in investing and financial decision-making processes. Optimism is among those biases and perhaps to be optimistic about the future is the most prominent feature among the traits of the mental biases. Some people always underestimate probabilities of unfortunate events including driving accidents or the risk of getting cancer [23]. Optimism is defined as the tendency to overestimate the probability of occurring good events and underestimate the probability of the occurrence of bad events [15, 5]. In addition, by exploiting the information asymmetry phenomenon for achieving their personal interests and values, managers can make good use of optimism trait as one of the behavioral attributes and as a result, make some decisions, which may affect the information and how they react to the behavior of users, especially actual and potential shareholders. Also, it can lead to an increase or decrease in the price and volume of stock trading. Building an awareness of psychological biases is crucial for achieving success in financial decision-making. In order to influence the decisions made by shareholders, managers may have optimistic or pessimistic behavior to forecast the profits [10]. Moreover, in order to maintain their position and credibility, optimistic managers are always motivated to manage the information in an appropriate way. If managers are free from opportunism, and there is no problem regarding the agency conflict and information asymmetry issues, the managers may also make inappropriate decisions about their corporations through their optimistic attitude. In this regard, the type of attitude and managerial personality in relation to procedures and financial reporting, can affect the way in which the information is prepared. According to the signaling theory, there is an asymmetric information between the company and the investors. This asymmetric information results from the investor's misunderstanding about the company's actual operational situation. According to the signaling theory, the information asymmetry occurred between domestic and foreign shareholders may create an unfair trading advantage for internal staff in the financial markets [1]. Signaling of the private information provided by management, opportunistic choices within the limits of accepted accounting principles, mistakes and fraud can be cited as the examples of profit management and user perception management reflecting the personality and attitude types. According to the abovementioned issues, the main question of the research was to investigate the impact of managers' optimism on the relationship between the

major shareholder's patience and the information influence management in the companies listed on the Tehran Stock Exchange.

This research has been structured as follows: theoretical and empirical background of the research, formulation of the hypotheses and research methodology, and finally, the findings of the research, along with the conclusions and suggestions have been stated.

#### 2 Literature Review

# 2.1 Patience of Major Shareholders and Information Influence Management

If firms wish to succeed, they need to pay attention to the interests of various stakeholder groups, such as shareholders, consumers and competitors. However, when different stakeholders have conflicting interests and limited resources, these might be represented by a big challenge to meet all the needs and benefits. The key question now is as follows: how do managers prioritize different interests of interest groups and what factors influence these decisions? Information influence management theory might help us to answer this question. In information influence management, people try to distort the user's perception of objectives, strategy and vision of the company in order to influence the perception of others and for personal interests. Managers act as a player in the corporate scene; they play in such a manner that they can create the same unique and desired images for the audience. Managers select and address the interests of a particular group of stakeholders effectively. For example, they select investors with a limited and unlimited focus (patience) or other stakeholders and customers[36].

When managers face incentives and pressures to report their superior performance, this may lead them to overemphasize their short-term goals. This is because they are concerned about achieving their three-month revenue targets. Research has shown that managers' failure have reduced stock prices and subsequently have led to the dismissal of managers and the immediate takeover of the company[39]. For instance, limited investment (patient) generally has investment horizons of 1.9 years or less, and in order to maximize profits in the short term, they trade (buy and sell) using the information that affects their short-term visions. However, long-term investors invest for a longer period and are less likely to be distressed by short-term price movements [36].

#### 2.2 Managerial Optimism and Major Shareholders

Personality traits are one of the demographic factors involved in short-term and long-term decisions of shareholders. Identifying shareholders' personality traits and behavioral deviations, as well as offering programs to reduce their possible impacts on behavioral finance can lessen the extent of deviations in long-term decisions and help shareholders to achieve their long-term goals [2]. In addition, the shareholders' behavior is affected by numerous factors, including behavioral ambiguities that deal with the issues of uncertainty and lack of information transparency. Based on the assumptions of efficient market hypothesis, shareholders respond to the new information in a reasonable way. Many stakeholders emphasize the importance of information transparency regarding the company's strategies in today's sensitive investment environment. Correct and transparent financial information provided by the companies is of great importance for shareholders. Dissemination of confidential and heterogeneous information will lead to different reactions in the financial markets, which this in turn results into the occurrence of biased, inaccurate and misleading analyses [1]. Some companies provide inaccurate infor-

mation to shareholders leading to misleading behaviors and inappropriate choice among them. Therefore, providing incorrect information affects the ability of management to influence the market through financial reporting manipulation. Furthermore, the corporate transparency is one of the crucial factors required for stock market to achieve optimal information efficiency, which can be useful in reducing investment risk. Manager's behavioral traits are one of the important factors in the decision-making process associated with the company; the optimism one is among them. Managers naturally have willingness to be more optimistic toward the business unit. High levels of optimism lead to the overestimation of earnings and income. Meanwhile, optimistic managers believe in their optimistic and unrealistic estimates and can even lead to deliberate misconducts [28]. In this case, optimistic managers are aware of their current wrong or inaccurate idea, but are more likely to justify them because they believe that the firm's future performance is projected to be under their management, which compensates their faults or wrong decisions. Ultimately, in order to compensate the faults, the managers should disclose their initial mistakes or make the biggest mistakes in order to compensate them [24]. Therefore, it can be argued that the shareholders are not able to identify the loss-making projects in an environment with high levels of information asymmetry; the negative returns on these projects will be accumulated in the company during the time and their disclosure will lead to a sharp fall in stock prices [15].

# 2.3 The Effect of Managers' Optimism

Information influence management has received a lot of attention among behavioral science scholars. To shape their identity, people manage their impacts on others. In other words, influence management is described as an attempt to stimulate and control the effects and evaluations of others and our reactions to our behavior. Influential players play a key role in how the others shape their images toward them. Therefore, in accounting literature, it is known as the theory of information asymmetry, which has been developed in relation to the agency theory. This implies that managers do not disclose and convey their information to others, or disclose them when they lose their value. Financial information can have an impact on the distribution of wealth between shareholders, company's adopted risk, rate of capital formation in the economic system, and the way of allocating funds (amounts invested) to different companies [29]. In other words, it can be argued that the managers provide information to users in such a way that it reflects the goals and future of the company in a desirable way and consider it sustainable. However, they have inadequate information about the facts based on the future operations and activities. Therefore, this level of information disclosure has no impact on future performance and may not result in improved operations and company performance [17]. According to the Information Management theory, managers are able to take advantage of the voluntary opportunities provided by accounting and financial reporting in an appropriate manner and attempt to allow the transfer of private information by exploiting these opportunities only accessed by company managers without shareholders' awareness. As discussed in the above, Information Management theory is closely interwoven with signaling theory. The signaling theory suggests that companies rely on private equity markets to meet their financial needs in today's world [4]. Contrary to Information Management theory, the viewpoint of the emergence of opportunistic behaviors exhibited by the managers towards companies and their managers is built on a pessimistic approach, which believes that managers exploit the opportunities and flexibility provided by accounting and financial reporting seeking to conceal the facts from the shareholders based on these powers and discretionary accruals. According to the theory, the corporate manager's aim is to maximize

their wealth at the expense of shareholders [6]. The opportunistic behaviors' theory has a close relationship with the agency theory in terms of the content and the reward hypothesis suggested by a set of positive theories [24]. Based on the agency theory, an entity is represented as an artificial structure; in other words, it is a series of contracts concluded between the interest groups. Thus, it is inevitable to see a conflict between the interests of the parties in the firm activities. As a result, when managers are able to exercise some authority to provide financial reporting, they will try to misuse this advantage by taking into account the conflict of interests created potentially between them and the owners and other stakeholders, as well as the amount of salary, benefits and the overall welfare depending on their performance outcomes. This implication suggests that by relying on these authorities, managers hide their negative aspects of their poor performance, while at the same time they try to emphasize on the positive aspects of their performance or refrain from taking responsibility for their functional weaknesses [5]. In other words, having the capacity to exercise power in the financial reporting process paves the ground for the emergence of opportunistic behaviors for managers [4]. Since the manager is mainly responsible for choosing and applying basic methods, and it estimates the basic financial reporting, it is likely that they affect the manager's personality traits including optimism in each stage and investment factors, organizational strategies and financial reporting [22]. Financial scholars maintain that managers' optimism is one of the reasons for the involvement of managers in appropriate acquisition programs and prepayment for target companies [25]. Optimistic managers believe that they own unique information that others may have access to them [6]. If managers be able to conceal the bad news for a long period of time, it seems that negative information would be stored within a company. Therefore, conservative procedures will stand against incentives and management inclination and decrease the risk of investing in stocks market and possibly stock-market fall. According to Scherand and Zekman [28], managers showing no willingness to disclose their relevant profits in an appropriate way are very optimistic about the company's future performance; they may even make unrealistic profits by deliberately presenting false profits and not recognizing that optimistic forecasts will never be realized. Therefore, the implication is that with an increase in corporate secrecy, the managers' optimism will intensify the link between the major shareholder's patience and information influence management.

### 2.4 Empirical Background of the Study

Andrew et al. [3] analyzed the effect of long-term profit on reducing the management's shortsightedness. Their results showed that long-term profits had no impact on profit management and efficient investment decision-making. Overall, the evidence suggested that long-term guidelines did not decrease manager's shortsightedness. Gholami and Lalabr [12] investigated the relationship between financial incentives of board members and disclosure of corporate risk with an emphasis on the levels of corporate performance and risk. Their sample included 98 listed companies in Tehran Stock Exchange between 2011 and 2015. According to the regression results, board member's financial incentives affected the quality and expansion of firm's risk disclosure. In another study, Tavassoli et al. [38] analysed the correspondence between agency theory and neoclassical theory, as well as the new ownership and diversity of public sector companies in corporate life cycle. Their sample included 45 companies. Regression results revealed that with an increase in age and size, public sector companies are more likely to seize the fixed assets of other companies to restructure and achieve improved operations. However, if the ownership of other companies is accepted by these companies, most public sector companies do this in the middle of their lifetime and during growth period. Likewise, Khabazkar Foomani and

Sarlak [18] examined the relationship between information asymmetry, dividend policy and ownership structure. Their sample included 155 listed companies in Tehran Stock Exchange between 2011 and 2015. Regression results indicated that the firms with asymmetric information are more likely to reduce dividends, as well as companies affiliated with the government facing asymmetric information are likely to decrease dividends compared to non-governmental companies. Finally, findings showed that in order to improve information transparency, structural reforms have a positive and reverse effect on the relationship between information asymmetry and dividend policies. In another study entitled as Investment Cash Flow Sensitivity and Managerial Optimism, Ben-Mohammad et al. [5] investigated the sensitivity of cash flow to investment through panel data of American firms during the period 1999-2014. The results indicated that the sensitivity is stronger among the companies with financial constraints. They also found that the board's profile could reduce the changes in investment policies. Kiymez [18] examined the relationship between accounting literature and the concept of intrinsic optimism and included this insight in financial reporting. They concluded that individual's inherent optimism is likely to have an impact on financial reporting and showed that optimism is often developed through two trust and motivation factors in accounting practice. Further, in a study entitled as Managing the Information Impact through its Limited Disclosure in the Annual Report of Companies, Leung et al [19] studied the cover disclosure of limited information in the annual reports of companies together with the concept of information impact management. According to their results, companies with poor and risky performance are likely to experience more financial distress in disclosing limited information in their annual reports. Furthermore, the results showed that the companies with limited disclosure of information would demonstrate weaker performance in the future. Bowman [6] assessed the effects of managerial behavioral biases and optimistic management on the managers' expectations for revenue leveraging as well as unexpected earnings, and reached two main conclusions: First, companies with optimistic managers are more likely to leverage their earnings compared with managers with rational thinking. Secondly, although like rational managers, optimistic managers are less likely to report unexpected positive or negative earnings, optimistic managers tend to report more unexpected revenues compared to rational managers. These results hold true even by taking into consideration other effective factors for leveraging unexpected earnings and revenues, such as firm size, financial leverage, and book value to market value ratio, influence power, profitability, asymmetric information, agency problems, systemic risk, investment diversification, corporate governance, manager's share, ownership options, and industrial effects. In a study entitled as "Attitudes of Managers and Corporate Activities", Graham and Partners [13] demonstrated that corporate personality features of senior executives are associated with financial reporting and other financial and non-financial policies. Scerand and Zekman [28] maintained that overconfident managers are more prone to optimism bias and are more likely to make false decisions. Moreover, they found that overconfident managers are more likely to disclose their profits (profits manipulation, which would direct them to false statement made with deliberate intent to deceive). Shamseddini et al. [30] investigated the effect of investors' behavior and management on stock returns. The evidence and experimental results showed that the behavioral variables studied have a reverse and significant impact on the stock market of the companies. This suggests that increased overconfidence in managers leads to the reduction of herding behavior of investors as well as their emotional tendency and stock returns. Khodamie and Masoodzadeh [17] analyzed the management of information users' impression through disclosure in annual reports. They aimed at measuring the managerial impression strategy

through voluntary disclosure. In this regard, they measured the impact of different factors and conditions such as current performance, financial distress and ownership percentage on the disclosure level. The results showed that there was a positive and significant correlation between the current performance and financial distress level of companies and disclosure level. It was also found that family ownership has a negative and significant relationship with the disclosure level and no significant correlation has been observed between the disclosure level and future performance. Moradi et al. [23] analyzed the relationship between corporate investment horizons and information content of unexpected dividends. Their findings indicated that corporate investment horizon in general and their short-term and long-term horizons have a significant and inverse impact on unexpected dividends as a criterion for information content of unexpected earnings. Therefore, it seems that the improvement of corporate investors' horizons has led to a reduction in the difference between the estimated earnings and the actual dividend. In another study, Rezaei and Mohammadpour [26] examined the relationship between the information influence management and corporate performance using limited information disclosure. The results showed no positive and significant correlation between information influence management and changes in the value and returns of corporation's assets. It was also suggested that financial distress can weaken the relationship between information influence management and corporate value changes, but had no impact on the information influence management and changes in corporate return. No evidence was found regarding the impact of institutional ownership on the relationship between information influence management and changes of value and return on assets.

## 3 Research Hypotheses and Research Model

The following research hypotheses were developed based on theoretical foundations and previous researches:

First hypothesis: There is a significant relationship between stakeholder's patience and high level of information influence management.

Second hypothesis: There is a significant relationship between stakeholder's patience and low level of information influence management.

third hypothesis: There is a significant relationship between stakeholder's patience and balanced (moderate) level of information influence management.

Fourth hypothesis: Managerial optimism strengthens the relationship between stakeholder's patience and high level of information influence management.

Fifth hypothesis: Managerial optimism strengthens the relationship between stakeholder's patience and low level of information influence management.

Sixth hypothesis: Managerial optimism strengthens the relationship between stakeholder's patience and moderate (balanced) level of information influence management.

The following models were used to test the research hypotheses:

Regression model for testing three first hypotheses:

$$MIM/LIM/HIM = \beta_0 + \beta_1 PI_{i,t} + \beta_3 OR_{it} + \beta_4 MS_{it} + \beta_5 Profit_{it} + \mathcal{E}_{it}$$
(1)

The regression model for testing three-second hypothesis:

$$MIM/LIM/HIM = \beta_0 + \beta_1 PI_{i,t} + \beta_2 OP_{it} + \beta_3 OP \times PI_{it} + \beta_4 OR_{it} + \beta_5 MS_{it} + \beta_6 Profit_{it} + \varepsilon_{it}$$
(2)

Dependent variable: Information Influence Management (IM)

The following model has been used according to Leung et al. [19]:

$$\begin{split} DIS_{it} &= \alpha_0 + \beta_1 ROA_{it} + \beta_2 MTB_{it} + \beta_3 DISTRESS_{it} + \beta_4 OWN_{it} + \beta_5 NEWEQUITY_{it} + \beta_6 DEBT_{it} + \beta_7 LI-QUID_{it} + \beta_8 SIZE_{it} + \beta_9 GROWTH_{it} + \beta_{10} DUALITY_{it} + \beta_{11} PINDit + \epsilon_{it} \end{split}$$

DIS: Disclosure scoreboard; ROA: Return on assets; MTB: Growth opportunity; DISTRESS: Financial distress; OWN: Institutional ownership; NEW EQUITY: New equality; DEBT: Debt ratio; LIQUID: liquidity ratio; SIZE: Firm size; GROWTH: Growth; DUALITY: CEO duality; PIND: Board Independence; ε: Residual.

Then, the model (1) was utilized to calculate the values of the variable of information influence management and the statements related to the model error in the limited disclosure of information as follows.

1. The value  $\frac{1}{|\epsilon|}$  was calculated for the whole year - companies. 2. The values  $\frac{1}{|\epsilon|}$  were sorted in ascending and descending order. 3. Firms with quartile greater than three points were considered as one and otherwise zero. Model error values were used instead of the one value and thus were selected as companies with high level of information influence management.

$$HIM \leftarrow \frac{1}{|\epsilon|} \ge Q3$$

Firms with quartile lower than one point were considered one and otherwise zero. Model error values were used instead of the one value and thus were selected as companies with low level of information influence management.

$$LIM \leftarrow \frac{1}{|\epsilon|} \ge Q1$$

3. Firms with quartile values greater than the first and third were considered one and otherwise zero. Model error values were used instead of the one value and thus were selected as companies with moderate (balanced) level of information influence management.

$$MIM \leftarrow q1 \le \frac{1}{|\epsilon|} \le Q3$$

Moderating variable:

Optimism management (OP) has been calculated by estimating the seasonal profit margin per share divided by its actual profit. The manager is considered optimistic if the number of seasons for the expected profit is higher than the real profit in one year and otherwise the manager is conservative. Then, the mean values for optimistic seasons have been calculated [20 & 14].

#### Independent variable:

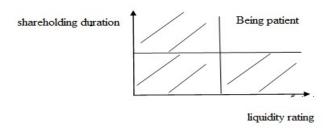
Major shareholders 'patience (PI): In order to identify the major shareholders' patience, if the trading time interval (shareholding duration) in a company was higher than the average annual stock value of the entire stock exchange and the stock liquidity rating was high, the stock belonged to individuals with tremendous amount of patience for investment, otherwise they were impatient. In this regard, relationships 1 to 2 were used.

$$(A) = \frac{\frac{trading\ volume}{trading\ frequency} \times trading\ days}{Total\ number\ of\ shares\ issued} \times 365$$

(2)

The mean of shareholding duration is taken by the ratio of each year for companies; if it was greater than the mean value, it would be considered one and otherwise zero. In addition, we provided the liquidity rating of the stock from the Codal site and took the mean ratio for each company. If it was greater than the mean value, it would be considered one and otherwise zero.

The following relationship has been obtained:



Control variables

Industry Market share (MS): The company's sale ratio to the total sales in the industry [8] Profit (PROFIT): An indicator for the company's management performance obtained from operating dividends to assets [6].

Operating risk (OR): The following two methods were used to calculate the strategy:

Method 1: Asset Risk [18].

S: Sale, TA: Total assets,  $X \forall$ : Mean X,  $\sigma$ : SD. X.

$$X = \frac{sales}{TA}$$
  $OR_1 = \frac{X - \bar{X}}{\sigma}$ 

Second Method: Human Resources Risk [12].

$$Y = \frac{sales}{NE} \qquad OR_2 = \frac{Y - \bar{Y}}{\sigma Y}$$

NE: number of employees S: sales  $\bar{Y}$ : mean Y,  $\sigma$ : SD

 $OR = OR_1 + OR_2$ 

# 4 Proposed Methodology and Findings

This was a descriptive correlational study with a post event research design. The application of past data was the rational for the selection of post-event research design. In addition, this research was applied in nature based on its applications for the decision making process among the investors.

The following restrictions were applied to determine the statistical population of the research: the financial period ending on March per year; no change of the fiscal year during the research period; continuous operation of the company in the stock exchange during the research period; the company's shares are tradable for at least six months a year; exclusion of investment and financial firms; and the availability to the information needed to conduct the research for the period under consideration. Finally, the financial data of 87 companies listed on Tehran Stock Exchange were analyzed for 10 years period from 2008 to 2017 to examine the relationship between variables for testing research hypotheses.

**Table 1:** Descriptive statistics of research variables

Variable	symbol	mean	Standard deviation	Kurtosis	Skewness	Minimum	Maximum	Number of obser- vations
Optimism	OP	125.8	38.31	2.551	0.479	60	219	
Patience of major shareholders	PI	0.428	0.495	1.086	0.293	0	1	
High level of infor- mation influence man- agement	НІМ	0.160	0.330	7.797	2.278	0.000	1.691	
Low level of information influence management	LIM	1.011	0.021	3.207	1.386	0.000	0.064	
Moderate or balanced level of information influence management	MIM	0.062	0.072	2.533	0.799	0.000	0.261	
Industry market share	MS	0.051	0. 60	6.565	2.002	0.000	0.297	
Operational risk	OR	0.196	0.758	2.675	0.621	-1.45	1.979	
Profitability	PROFIT	0.154	0.136	3.894	0.408	-0.32	0.632	
Debt ratio	DEBT	0.583	0.146	1.930	-0.17	0.290	0.832	870
Disclosure ratio	DIS	68.77	21.28	2.637	-0.63	6	100	
Dual management tasks	DUALITY	0.361	0.465	8.117	1.772	0	4	
Company's growth	GROWTH	0.156	0.189	2.629	0.249	-0.23	0.618	
Liquidity ratio	LIQUID	-0.56	-0.53	3.348	-0.85	-0.27	0.062	
Growth opportunity	MTB	0.021	0.020	2.193	1.043	0.001	0.076	
New stock issue	NEWEQUITY	0.106	0.213	5.015	1.826	0.000	0.925	
Institutional ownership	OWN	0.763	0.162	5.415	-1.46	0.138	0.998	
Independence of the board	PIND	0.616	0.256	3.337	-0.74	0.000	1.333	
Asset returns	ROA	0.123	0.133	4.428	0.542	-0.37	0631	
Firm size	SIZE	27.57	1.562	3.713	0.660	23.84	32.882	

Descriptive statistics of the research variables can be seen in Table 1.According to the results of descriptive statistics of the research variables and the closeness of the mean and median values in many variables, it can be concluded that all variables were normally distributed. Additionally, standard deviation statistics, kurtosis and skewness coefficients were employed to demonstrate the normal distribution of data [34]. The analysis of these criteria revealed that the data related to the independent and

dependent variables were normally distributed because they maintained their minimum distance from the value presented for kurtosis. The average value for the return on assets was calculated 0.123, suggesting a 12% increase on average in the companies listed on the stock exchange. Moreover, according to the average value calculated for the debt ratio variable (0.58), it can be demonstrated that debt played a very crucial role in the capital structure of Iranian companies. Based on the average institutional ownership variable (0.76), it can be claimed that institutional owners had a contributing role in the ownership structure of sample companies. The results of fitted regression model for the first three hyp. These are shown in Table 2.

Table 2: Results of fitted	regression model for	the first three h	vnotheses (nart 1)
Table 2. Results of filled	TURIUSSION MOUCH TO	the mot thice n	voouneses (part 1)

Number of observations: 870				Number of observations: 870						
Dependent variable: lim					Dependent variable: Mim					
Symbol	Coefficients	T Statistics	Probability	vif	Symbol	Coefficients	T Statistics	Probability	vif	
С	0.037	23.663	0.001	-	С	0.107	18.635	0.001	-	
PI	0.001	0.568	0.570	1.025	PI	0.002	0.444	0.657	1.020	
MS	-0.016	-1.036	0.301	1.104	MS	0.016	0.253	0.800	1.107	
OR	0.000	0.077	0.939	1.128	OR	0.003	0.742	0.459	1.11	
PROFIT	-0.005	-0.938	0.439	1.031	PROFIT	-0.018	-0.811	0.418	1.029	
Coefficien	Coefficient of determination		0.654		Coefficient of determination			0.57	0.571	
Adjusted coefficient of determination		0.614		Adjusted coefficient of determination			0.521			
Durbin Watson statistic		2.249		Durbin Watson statistic			2.093			
Fisher statistics probability		0.000		Fisher statistics probability			0.000			
F-test Limer		0.000		F-test Limer			0.000			
Hausman test		0.00	0.000		Hausman test			0.000		

Tables (2,3,4 and 5) represent the results of testing first to sixth hypotheses. The model was tested using the fixed effects method. As shown in Tables 2 and 3, the values of F statistics and the probability suggested that the null hypothesis, the total meaninglessness of the whole model (zero coefficients), could be rejected and the estimated regression model was meaningful. The determination coefficients for each of the six hypotheses were calculated as 0.654, 0.571, 0.797, 0.655, 0.573, and 0.790. This means that 65%, 57%, 80%, 66%, 57%, and 79% of the dependent variable variations could be explained by independent variable.

The Durbin Watson value for all variables has been calculated 2.249, 2.093, 2.338, 2.252, 2.088 and 2.341, respectively. Since the values range between 1.5 to 2.5, this indicated that there was no serial correlation or autocorrelation between the residuals. The probability value (significance level) of the variables other than the optimism moderator has been calculated more than 5%.

As a result, the first three hypotheses of the research suggesting that the significant impact of the major stakeholders' patience on information influence management was rejected. Moreover, regarding the three hypotheses of the research suggesting the impact of managers' optimism on the relationship between shareholder's patience and information influence management, results showed that the hypotheses were only accepted for information influence management having balanced or moderate level, with a value of 0.043 less than 0.05 at 95% confidence level and two other hypotheses were rejected.

Table 3: Results of fitted regression model for the first three hypotheses (part 2)

Number of observations: 870				
Dependent variable: Him				
Symbol	Coefficients	T Statistics	Probability	vif
С	0.372	80.220	0.000	-
PI	0.000	0.434	0.665	2.120
MS	0.039	1.235	0.217	1.115
OR	-0.002	-1.235	0.153	2.108
PROFIT	-0.002	-0.502	0.616	1.128
Coefficient of determination		0.797		
Adjusted coefficient of determ		0.773		
Durbin Watson statistic		2.338		
Fisher statistics probability	0.000			
F-test Limer	0.000			
Hausman test	0.000			

Table 4: Results of fitted regression model for the Three second hypotheses (part 1)

Number of observations: 870				Number of observations: 870					
Dependent variable: Lim			Dependent variable: Mim						
Symbol	Coefficients	T Statistics	Probability	vif	Symbol Coefficients T Statistics			Probability	vif
С	0.036	15.719	0.000	-	С	0.114	13.071	0.000	-
PI	0.001-	-0.426	0.671	4.563	PI	-0.012	0.140	0.140	4.56 4
OP	0.000	0.496	0.620	1.042	OP	-0.000	0.289	0.289	1.03
OP×PI	0.000	0.866	0.387	4.567	OP×PI	0.000	0.043	0.043	4.55
MS	-0.018	-1.114	0.253	41.11	MS	0.011	0.856	0.856	1.11
OR	0.000	0.119	0.905	1.138	OR	0.003	0.442	0.442	1.15
PROFIT	-0.005	-0.950	0.342	1.031	PROFIT	-0.018	0.822	0.411	1.02
Coefficient	Coefficient of determination 0.655		5	Coefficient of determination			0.573		
Adjusted coefficient of determination		0.613		Adjusted coefficient of determination		0.522			
Durbin Watson statistic		2.252		Durbin Watson statistic			2.088		
Fisher statistics probability		0.000		Fisher statistics probability			0.000		
F-test Limer		0.000		F-test Limer			0.000		
Hausman test		0.000	0	Hausman test		0.000			

**Table 5:** Results of fitted regression model for the Three second hypotheses (part 2)

Number of observations: 870					
Dependent variable: Him					
Symbol	Coefficients	T Statistics	Probability	vif	
C	0.368	59.113	0.000	-	
PI	0.001-	-0.336	0.737	4.129	
OP	0.000	1.082	0.279	1.135	
OP×PI	0.000	0.901	0.368	4.560	
MS	0.051-	1.045	0.296	1.120	
OR	0.003-	-1.189	0.235	1.131	
PROFIT	-0.001	-0.080	0.936	1.012	
Coefficient of determination		0.790			
Adjusted coefficient of determ	ination		0.765		
Durbin Watson statistic	2.341				
Fisher statistics probability	0.000				
F-test Limer	0.000				
Hausman test 0.000					

## **5 Conclusion and Suggestions**

Regarding the behavioural viewpoint, the researchers believe that individual psychological factors affect the quality of decision-making behaviour. Behavioural finance theory plays a decisive and important role in explaining the behaviour and decision-making of investors in the market, as well as the behaviour of financial markets. This knowledge has been built on the notion that humans possess inherent complexities, behaviour and personality that their understanding entails using a scientific framework known as psychology [9]. Further, the growing literature of economic psychology and human behaviour has suggested that, behavioural tendencies and personality traits of managers and stakeholders affect their economic decisions due to the presence of important constraints imposed on resource absorption. On the other hand, capital market information affects how investors and companies interpret and react to the disclosure of financial information and, consequently, the capability of management to influence the market through financial reporting manipulation. Considering the above rational and the importance of the issue, this research sought to investigate the impact of managers' optimism on the relationship between the patience of major shareholders and information influence management. This research was of particular importance because no research has been conducted on the impact of managers' optimism on the relationship between the patience of major shareholders and information influence management. In addition, the present study analysed the effect of operational risk, profitability, and share of industry market variables. The first three hypotheses evaluated the relationship between the stakeholder's patience with the management of information influence at three levels (low, high and balanced (moderate)). The results of all three hypotheses were rejected at 95% confidence level. This suggests that there was no significant relationship between the stakeholder's patience and information influence management at three levels (high, low, and balanced). This implication suggested that managers do not regard any information as relevant and do not release them; this may be attributed to the behavioural behaviour of managers and stakeholder's patience rather than their information asymmetry.

Therefore, they act cautiously in the release and use of information because they are aware of the absence of a balance between the disclosure of information and message reception. Accordingly, patient shareholders are able to direct the board's management behaviour towards information influence management. So far, no research has been conducted to investigate the effect of managers' optimism on the relationship between shareholder's patience and information influence management and the research findings mentioned in the background section of the current study partly demonstrated the relationship between these variables. The results of this hypothesis were incongruent with those results of the study by Leung et al [19], indicating that firms with lower performance and higher risk were more likely to experience more financial distress in managing information influence, and were consistent with the results of the study by Soleimani and Goodarzi [33]. Furthermore, the first three hypotheses evaluated the relationship between the stakeholder's patience with the management of information influence at three levels (low, high and balanced (moderate)). The results of all three hypotheses were only confirmed for information influence management at moderate level and with 95% confidence level, suggesting that managerial optimism strengthened the relationship between stakeholder's patience and moderate or balanced level of information influence management. Therefore, managers with optimistic behavioural trait and information influence management attempted to maintain a high level of patient in the shareholders. This may result from the motivations arising from efficiency or opportunism features of managers. No research has been conducted on the impact of managers' optimism on the relationship between the patience of major shareholders and information influence management. The studies mentioned in the background section of the current study partly demonstrated the relationship between these variables. The findings of this study indicated that there was no significant relationship between the variables of research; they were consistent with the results of the study by Aligoli and Jalilian [2] suggesting that firms with inefficient management of profits were related to long-term institutional investors and vice versa. This study's results also corroborated the findings of the study by Kapss et al., indicating that individuals' optimism was likely to have an impact on financial reporting.

The following suggestions can be considered in the future studies:

- 1. Analysing the role of information influence management on the relationship between corporate ownership structure and reward programs for board of directors.
- 2. Analysing the effect of the major shareholders' patience on the quality of discretionary accruals, profit and financial deception.
- 3. Developing the present research using a set of optimistic traits and presenting a model to determine their impacts on profitability and other issues.
- 4. Analysing the motives of the board of directors in applying information management practices to users.
- 5. Analysing the effect of other behavioural factors related to major shareholders (behavioural optimism and loss aversion) on information influence management.

#### References

- [1] Abzari, M., Derakhshideh, H., *Impact of improving financial information on investors' attitudes in Stock Exchange of Isfahan*. Quarterly Journal of Planning and Budgeting. Eighteenth .2015, 1, P. 59-75, (in Persian).
- [2] Aliqoli, M., Jalilian, A., *Investigating the relationship between long-term / temporary institutional investors and management*. Journal of Management Accounting Knowledge Management, 2017, **4**, (in Persian).

- [3] Andrew, C, C., Shuping, C., Adam, E and Bin, M., Does Long-Term Earnings Guidance Mitigate Managerial Myopia?, 2018, Doi: 10.1007/s11142-013-9270-7.
- [4] Anvari Rostami, A, A., Mohammad Abadie, M., Investigating the impact of opportunistic strategies on predictability of financial reporting. Tenth National Accounting Conference in Iran, Alzahra University, 2013. P.319-335, (in Persian).
- [5] Ben Mohamed, E., Fairchild, R. and Bouri, A. Investment cash flow sensitivity under managerial optimism: New evidence from NYSE panel data firms, Journal of Economics, Finance and Administrative Science, 2017, 28, P.11-18, Doi: 10.2139/ssrn.2288702.
- [6] Bouwman, C. H. S. Managerial optimism and earnings smoothing. Journal of Banking & Finance, 2014, 41,P. 283-303, Doi: 10.1016/j.jbankfin.2013.12.019
- [7] Brundin, E. & Veronika, G. Entrepreneur's decision making under different levels of uncertainty: The role of emotions. International Journal of Entrepreneurial Behaviour & Research, 2013, 19(6), P.568-591, Doi: 10.1108/IJEBR-07-2012-0074.
- [8] Capps, G., L. Koonce, and K. Petroni, Natural Optimism in Financial Reporting: A State of Mind. Accounting Horizons, 2016, 30 (1).P.76-91, Doi:10.2308/acch-51277.
- [9] Darabi, R; Zarei A. The effect of management's overwhelming risk of falling stock prices with an emphasis on the moderating role of accounting conservatism. Journal of Financial Accounting Knowledge, 2017, 4(1), 12, (in Persian).
- [10] Ghaemi, M., H., Eskandrari, T. Investigating the behavior of corporate executives in predicting annual profit. Quarterly of Empirical Financial Accounting Studies, 2014, 11(40), P. 53-75, (in Persian).
- [11] Ghayour Baghie, S M., Behboudie, O. Factors affecting investor behavior using phenomenological approach. Journal of Management of Finance and Funds. 2013, 3(18), P. 57-67, (in Persian).
- [12] GHolami, R., & Lalbar, A. Studying the Relationship between the Financial Incentives of Board Members and Disclosure of Corporate Risk, Emphasizing the Levels of Corporate Performance and Risk, Advances in Mathematical Finance & Applications, 2018, 3(1), 2018, P. 69-78. Doi: 10.22034/amfa.2018.539135, (in Persian).
- [13] Gordon, L., Loeb, M., and Tesng, C. Enterprise Risk Mangement and firm performance: Acontingency perspective, journal of Accounting and public policy, 2009, 28(4), P.301-327, pol.2009.06.006.
- [14] Graham, J. R., Harvey, C. R., & Puri, M. Managerial attitudes and corporate actions. Journal of Financial Economics, 2013, **109** (1), P. 103-121, Doi: 10.1016/j.jfineco.2013.01.010.
- [15] Huang, W., F. Jiang, Z. Liu, and M. Zhang. Agency cost, top executives' overconfidence, and investmentcash flow sensitivity Evidence from listed companies in China. Pacific-Basin Finance Journal, 2011, 19(3), P. 261-277, Doi:pacfin:v:19:y:2011:i:3:p:261-277.

- [16] Hutton, A. P., A. J. Marcus, and H. Tehranian. *Opaque Financial Reports, R2, and Crash Risk*. Journal of Financial Economics, 2009, **94**(1),P. 67-86, Doi: 10.1016/j.jfineco.2008.10.003.
- [17] Jaafar, H., Halim, H. A., Ismail, R., & Ahmad, A. S. Fraudulent Financial Reporting and Impression Management: An Examination of Corporate Accounting Narratives. International Journal of Academic Research in Business and Social Sciences, 2018, **8**(10), P. 824–837.
- [18] Khabazkar Foomani, M., & Sarlak, A. *Investigating the relationship among information asymmetry, dividend policy and ownership structure*, Advances in Mathematical Finance & Applications, 2018, **3**(2), P. 69-80, Doi: 10.22034/amfa.2018.540832. (in Persian).
- [19] Khajavie, Sh., Dehghani Sa'adi, A,A., Gerami Shirazi, F., *The effect of managers' narcissism on earnings management and financial performance*. Journal of Accounting Progress of Shiraz University, 2017, **8**(2), P. 123-149, (in Persian).
- [20] Khoddamipour, A., Bagheri Masoudzadeh, R., *Managing user impressions through disclosure in annual reports*. Journal of Scientific Accounting, Accounting Knowledge, 2018, 1 (8), P. 51-74, (in Persian).
- [21] Kiymaz, H., The impact of announced motives, financial distress, and industry affiliation on shareholders' wealth: evidence from large sell-offs. Business and economics, 2006,P. 69-89.
- [22] Leung, S., Parker, Lee., Courtis, J., Impression management through minimal narrative disclosure in annual reports. The British Accounting Review, 2015, 47, P. 275 289, Doi:10.1177/232948841771 2010
- [23] Li, J., Tong ,W., Managerial Overconfidence, CEO Selection and Corporate Investment: An Empirical Analysis. Working paper, 2012, Doi: 10.1111/j.1540-6261.2008.01412
- [24] Lindenberg, E. B., & Ross, S. A., *Tobin's Q ratio and industrial organization*. Journal of Business, 1981, **54** (1),P.1–32, Doi:10.1086/296120.
- [25] Mehregan, M, R., Delshad, A., *Investigating the effect of changing the attitude of overconfident management to rational management on stock returns*. Journal of Financial Accounting, 2018, **4**(2), P.1-26, (in Persian).
- [26] Moradi, M, Prandeh, E, Marandi, Z., *Investigating the relationship between the stockholders' investment horizon and information content of unexpected dividends*. Magazine of Financial Engineering & Securities Management, 2018, 33, (in Persian).
- [27] Presley, T. J., and Abbott, L. J., AIA submission: CEO overconfidence and the incidence of financial restatement. Advances in Accounting, 2013, 29(1), P.74-84, Doi: 10.1016/j.adiac.2013.03.007
- [28] Ramsheh, M., Mollanzeri, M., Overconfident management and accounting conservatism. Accounting Knowledge, 2015, 15 (16), P.55-79, (in Persian).
- [29] Rezaei, F., Mohammadpour, S., *The relationship between information influence management through disclosure of information and the performance of companies*. Graduates of, Takestan Higher Education Institut, 2018, (in Persian).
- [30] Sakunasingha, B. An empirical study into factors influencing the use of value-based management tools, 2006.

- [31] Schrand, C., Zechman, S., Executive Overconfidence and Slippery Slope to Financial Misreporting; Journal of Accounting and economics, 2012, 53(1-2), P. 311-329, Doi 10.1016/j.jacceco.2011.09.001.
- [32] Schroeder, R., Clarke, M., Jack, K., Analysis of Financial Accounting Theory, Translated by Ali Parsayian, Tehran: Termeh Press, 2012, ISBN: 9781118582794.
- [33] Setayesh, M, H., Shamseddini, K., Investigating the relationship between emotional attitudes of investors and Stock Prices of Companies Accepted in Tehran Stock Exchange. Accounting Advancements, 2017, 8(1), P. 103-125, (in Persian).
- [34] Shamseddini, K; Daneshie; V; Seyyedi; F. Investigating the impact of investors' behavior and stock equity management. Journal of Accounting Knowledge, 2019, 9(2). P. 163-18, (in Persian).
- [35] Smales L, A. News sentiment and the investor fear gauge. Finance Research Letters, 2014, 11(2), P.122-130, Doi: 10.1080/00036846.2016.1259754.
- [36] Sobhanie, M, Rezaei, F and Kurdestanie, G. Determining the optimal limit of accounting information quality for patient and inpatient shareholders using ultra-innovative algorithms, 2019, Ph.D. thesis, Islamic Azad University, Qazvin Branch. (in Persian).
- [37] Soleimani Amiri, G; Godarzi, N. Behavioral basics of dividend policy. Quarterly Journal of Empirical Financial Accounting Studies, 2019, **11**(39), P. 83-104, (in Persian).
- [38] Tavasoli, A., Saeidi, P., & Biglari, B. According to Agency Theory and Neoclassical Theory; New Ownership and Diversity of Public Sector Companies in Corporate Life Cycle, Advances in Mathematical Finance & Applications, 2018, 3(1), P. 1-16, Doi: 10.22034/amfa.2018.539131. (in Persian).
- [39] Wang, J. Literature Review on the Impression Management in Corporate Information Disclosure. Modern Economy, 2016, 7,P. 725-731.